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Postoperative Complications in Head and Neck Cancer

Erikka Baehring, BS, MT, RN, MSN, ANP, BC, and Ruth McCorkle, PhD, FAAN



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Head and neck cancer (HNC) encompasses several malignancies arising from different structures in the head and neck. The management of HNC is complex and requires multidisciplinary involvement with a range of treatment options that may lead to complications that have negative effects on patient outcomes. This article presents the role of surgery as primary treatment for HNC and describes postoperative complications, factors related to the development of complications, their clinical implications, and management. Comprehensive pre- and postoperative care is crucial in decreasing the incidence of complications and their impact on patient outcomes. Nurse need to be vigilant to prevent, monitor, and care for patients at risk for postoperative complications to decrease their morbidity, enhance their quality of life, and extend survival.

Erikka Baehring, BS, MT, RN, MSN, ANP, BC, was a master's student at the time this manuscript was written and Ruth McCorkle, PhD, FAAN, is the Florence S. Wald Professor of Nursing, both in the School of Nursing at Yale University in New Haven, CT. The authors take full responsibility for the content of the article. The authors did not receive honoraria for this work. The content of this article has been reviewed by independent peer reviewers to ensure that it is balanced, objective, and free from commercial bias. No financial relationships relevant to the content of this article have been disclosed by the authors, planners, independent peer reviewers, or editorial staff. McCorkle can be reached at ruth.mccorkle@yale.edu, with copy to editor at CJONEditor@ons.org. (First submission February 2012. Revision submitted April 2012. Accepted for publication May 28, 2012.)

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Surgical resection is the mainstay of treatment for head and neck cancer (HNC) (Carr, 2010), a number of cancers that collectively encompass about 5% of all cancer incidence in the United States (Jemal, Siegel, Xu, & Ward, 2010). Surgery is used as a single or combined treatment modality. Unfortunately, surgical procedures may be complicated by cardiac, pulmonary, and other comorbid disorders; infection; hemorrhage; shock; renal failure; and thromboembolic events. Site-specific complications, such as dysphonia or dysarthria, airway obstruction, dysphagia, mucositis, and severe pain also may occur as a result of surgery (Mendenhall, Werning, & Pfister, 2008). With adjunct chemotherapy and/or radiation, other potential complications arise.

The needs of patients with HNC are unique because of the physical and psychological impact of the disease and its treatment. No other area of the body is as exposed and nowhere else are scars, defects, and disfigurement as noticeable. In addition, vital organs for ingestion and breathing, as well as cranial nerves and vessels, are located here. Surgery has some degree of impact and the occurrence of complications may exacerbate a potentially negative impact on patient outcomes. Patients are susceptible to complications for a variety of reasons. Wound infection, for instance, is of particular concern because patients often are immunocompromised from their disease, neoadjuvant therapy, medications, transfusions, malnutrition, substance

abuse, and comorbidities. Postsurgical complications can have a profound impact on patient outcomes by increasing levels of physical and emotional pain and hospitalization time, as well as decreasing quality of life (QOL) (Paydarfar & Birkmeyer, 2006).

Preventing surgical complications of the head and neck is, therefore, imperative for the delivery of high-quality care and improvement of patient outcomes. By knowing and taking into consideration factors associated with postoperative complications, recovery can be enhanced. Nursing interventions implemented to monitor and care for patients at risk for developing complications, promote prevention, and enhance prompt management of symptoms can decrease morbidity. The purpose of this article is to describe the role of surgery as primary treatment for HNC, describe postoperative complications and factors related to their development, and discuss their clinical implications and management.

Literature Review

A computerized search of the electronic databases (CINAHL®, PubMed, Ovid, and MEDLINE®) was performed using the time-frame 1970 to October 2011. The terms *head and neck cancer*, *surgery*, *surgical complications*, *management*, *quality of life*, and *cost* were entered as key words. Results were limited to English language, nonintervention descriptive studies that